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TRANSPORTATION & COMMUNICATIONS: STRATEGIC DIRECTIONS 1986

Strategic Policy
Committee



Ministry of
Transportation and
Communications



published by:



Ontario
Ministry of
Transportation and
Communications
Hon. Ed Fulton, Minister
David Hobbs, Deputy Minister

printed by:

Graphic Services, MTC
February 1986
ISSN 0826-841X

Additional copies of this report or further information on MTC
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Ministry of
Transportation and
Communications

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As we move into the second decade of strategic planning at the ministry, I am pleased to present this year's directions. Although many changes have occurred in the past year, we have been able to demonstrate our ability to respond positively to new challenges. Our adaptability is partly due to our cyclical planning process which includes forward looking assessments of the external environment, position and prospects and emerging issues.

The strategic planning process underwent some refinements which are outlined in this document and this year had an external, government-wide focus. This was as a result of the Premier's request that each ministry outline future issues and priorities that address the specific strategic areas of excellence in education, adapting to the post-industrial society and future demographic impacts on health and institutional care.

Due to the nature of MTC's mandate, the focus of our response was on Ontario's movement into the post-industrial age, the importance of transportation and the growing significance of communications. MTC must not only ensure that an effective transportation infrastructure exists in the Province and support transportation-related and communications industries, but must also begin to play a wider role. The ministry needs to ensure that initiatives, policies and regulations support continued development of other sectors of the economy, such as tourism and cultural industries, and be sensitive to the needs of special populations.

As a result of this broad perspective, some internally focussed strategic areas covered in previous years' documents are not dealt with in depth. Issues such as the management of information technology, productivity improvements and provision of first class services to the public are as important today as they have been in the past and emphasis must continue to be placed on them. Our attention each year, during the strategic planning process, is placed on emerging trends and challenges that need to be addressed. Therefore, each year's document should not be viewed in isolation from previous directions. By their strategic nature, they are relevant long after publication. Each cycle builds on preceding cycles and, therefore, each year's document is an update of earlier versions.

I encourage employees to read this report to gain increased understanding as to the future directions in which MTC is heading and to apply this knowledge, as applicable, in carrying out your responsibilities and duties. There will continue to be many challenges and opportunities ahead as we move further into the post-industrial era.

If we are well prepared to meet the future we can be confident that this ministry will continue to be an organization in which we can all take pride.

David Hobbs
Deputy Minister

February 5, 1986



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PART I

*MANAGEMENT
PHILOSOPHY
AND PROCESS*

The Ministry

The Ministry of Transportation and Communications (MTC) has a staff of about 8,700 individuals, with diverse backgrounds, cultures and lifestyles and located in all areas of the province. The skills, values and commitment of these people are the strength of the ministry.

Today's ministry is the result of the 1971 amalgamation of the former Department of Highways and Department of Transport. The new ministry assumed responsibility for provincial interests in all transportation modes and the entire communications field. MTC has developed a comprehensive policy development and planning process, which enables the ministry to address the province's total transportation and communications needs.

The mobility of people, goods and information is fundamental to the standard of living enjoyed by Ontario residents. To ensure mobility, MTC carries out direct program delivery activities and funds municipal roads and transit through subsidy transfer payments. As well, the ministry licenses drivers and vehicles and regulates the bus and trucking industries. The ministry attempts to influence the policies of other jurisdictions with responsibilities for transportation and communications. Examples are found in the air, rail and marine offices and the communications division.

The ministry utilizes the private contracting industry to implement the highway construction program and, in part, for highway maintenance. MTC also assists specific client groups such as the shippers and carriers of goods; the automotive, intercity bus, and telecommunications industries; and all parties involved with the provision of air, rail, marine and public transit services. MTC supports the private sector through participation on government/industry councils and provision of a single point of contact for client industries in their dealings with the provincial government. The ministry is directly involved in helping Ontario's manufacturing and consulting industries to develop international markets in the transportation and communications sectors.

Mandate and Mission

The ministry's MANDATE statement defines the areas of responsibility which the Government of Ontario has assigned to MTC.

TO BE THE PROVINCIAL PRESENCE IN TRANSPORTATION AND COMMUNICATIONS; PROVIDE THE FOCAL POINT FOR THE IDENTIFICATION OF THE TRANSPORTATION AND COMMUNICATIONS NEEDS OF THE PEOPLE OF ONTARIO; AND SATISFY THEM THROUGH THE USE OF ROAD, RAIL, TRANSIT, AIR, WATER, PIPELINE AND COMMUNICATIONS SYSTEMS AND SERVICES IN ACCORDANCE WITH THE PREVAILING OBJECTIVES OF THE GOVERNMENT OF ONTARIO.

The mandate statement is a distillation of the broad directions given to MTC in the Speech from the Throne of March 30, 1971, which included:

"...DEVELOP AND EMPLOY WAYS TO MOVE LARGE NUMBERS OF PEOPLE AND GOODS AND STIMULATE THE ECONOMIC GROWTH OF THE PROVINCE..."

"...CREATE FUNCTIONAL, INTEGRATED AND BALANCED TRANSPORTATION SYSTEMS..."

"...INTEGRATE ROAD, RAIL, AIR AND WATER SERVICES THROUGHOUT THE PROVINCE..."

"...GIVE SPECIAL EMPHASIS TO THE TOTAL TRANSPORTATION SYSTEMS OF THE LARGER CITIES AND THEIR SURROUNDING COMMUTER AREAS..."

"...DEVELOP A TELECOMMUNICATIONS POLICY FOR ONTARIO WHICH WILL ENSURE THAT THE INTERESTS OF THE PEOPLE ARE FULLY REPRESENTED..."

The MISSION statement is a declaration of the action required to fulfill the ministry's mandate.

TO ACHIEVE MOBILITY OF PEOPLE, GOODS AND INFORMATION IN ONTARIO BY ASSURING ACCESS TO TRANSPORTATION AND COMMUNICATIONS SYSTEMS AND SERVICES WHICH CONTRIBUTE TO ECONOMIC GROWTH AND ARE SAFE, DEPENDABLE, EFFECTIVE, EFFICIENT, AND ENVIRONMENTALLY ACCEPTABLE.

The primary focus is on safe and economic mobility as the basic rationale for MTC's programs. All ministry activities, in both transportation and communications, relate to enhancing, channelling or controlling the movement of people, goods and information.

The second focus is on activities MTC undertakes to contribute to the economic well-being of the province.

Objectives

Five objectives have been defined to address MTC's mission.

1. TO ENSURE THAT A REASONABLE CHOICE OF TRANSPORTATION AND COMMUNICATIONS SERVICES EXISTS FOR THE MOBILITY OF PEOPLE, GOODS AND INFORMATION, WITHIN ONTARIO AND BETWEEN ONTARIO AND OTHER JURISDICTIONS.

Transportation and communications services are basic to the social, cultural and economic well-being of the province. These services should be available wherever practical.

2. TO PRESERVE THE PUBLIC AND PRIVATE TRANSPORTATION AND COMMUNICATIONS SYSTEMS ESSENTIAL TO ONTARIO, NOW AND FOR THE FUTURE.

Major public and private investments have been made for transportation and communications services and facilities throughout the province. The long-term economic interest of the province makes preservation of the infrastructure a major priority. However, MTC also recognizes the need for selective expansion of facilities and services to support regional, community and resource development.

3. TO PROMOTE SAFETY, EFFECTIVENESS, EFFICIENCY, ENVIRONMENTAL ACCEPTABILITY AND ENERGY CONSERVATION IN ALL MODES OF TRANSPORTATION AND COMMUNICATIONS SERVICES OPERATING IN THE PROVINCE.

MTC has been given responsibility to coordinate government programs in highway safety. Effectiveness and efficiency of transportation and communications services are crucial to the economy. Energy conservation and substitution are important given transportation's reliance on petroleum-based energy.

4. TO CONTRIBUTE TO ECONOMIC GROWTH WITHIN ONTARIO AND CANADA BY IDENTIFYING AND RESPONDING TO OPPORTUNITIES IN THE AREAS OF TRANSPORTATION AND COMMUNICATIONS SERVICES.

Services provided through MTC support the mobility of people, goods and information necessary for a strong economy and support the development of opportunities which advance Canadian technology. MTC works with other agencies and client industries to improve productivity and to take advantage of foreign trade opportunities.

5. TO MAINTAIN EFFECTIVE TWO-WAY COMMUNICATIONS WITH THE PUBLIC AND TO ENSURE THAT THE TRANSPORTATION AND COMMUNICATIONS EXPECTATIONS AND ASPIRATIONS OF VARIOUS SEGMENTS OF ONTARIO SOCIETY ARE IDENTIFIED AND RECONCILED WITHIN THE FRAMEWORK OF GOVERNMENT POLICIES AND PROGRAMS.

MTC has the responsibility of ensuring the wishes of the people of Ontario, as expressed through the provincial government, are included in the development of policies, programs and services. The ministry has to be sensitive to the changing environment and clearly articulate the provincial interests in all transportation and communications issues.

Principles

Management Principles

MTC's management principles ensure that the ministry properly discharges its duties as custodian of the public's trust.

MTC staff must adhere to the highest standards of conduct and integrity and accept accountability for their actions. Staff must contribute to government decision-making by ensuring all opportunities, threats, strengths and weaknesses in their areas of responsibility are identified and placed before the government, regardless of which level of government has the specific jurisdictional responsibility.

MTC staff must also cooperate with other ministries, governments and the private sector to achieve effectiveness in the total transportation and communications systems.

Finally, to maintain a strong, lean, results-oriented ministry, all activities must be conducted in a manner which is effective, efficient and economical. Thus, the skills and resources available at MTC must be fully utilized to increase internal productivity and to benefit client groups.

Human Resource Principles

MTC's human resource principles are intended to create an environment in which both ministry and personal goals may be achieved. To this end, MTC recognizes that people want to participate in the process and they want to feel that they are making a contribution. They must have a safe and healthy work place.

Staff who are given challenging work and an opportunity to become involved will achieve greater productivity with increased job satisfaction as an added benefit.

Managers must develop confidence in their staff by delegating appropriate authority and by encouraging and reinforcing staff for work well done. A spirit of teamwork and cooperation should be fostered along with equity, honesty, openness and a sensitivity to the varied cultures and lifestyles of MTC staff.

Managers must also recognize that people are a key provincial resource and that development of their staff is beneficial to the individual, to MTC, and to the Ontario government.

MTC people must be innovative and take personal initiative to achieve self-development and improvement. There will continue to be heavy demands on financial resources and MTC will continue to move from a technical to a management-oriented organization. These pressures require people to be flexible in their job and career expectations. For example, lateral moves will provide an opportunity to acquire and apply broader knowledge and new skills, important assets in the MTC of today and tomorrow.

Management Structure

In 1975, MTC adopted the present matrix management style that involves a program and committee structure which cuts horizontally across the line organization. This flexible matrix arrangement provides for strong corporate leadership, coordinated policy development and resources management, and effective delivery of products and services through the line organization.

Strategic Policy Committee (SPC)

This corporate committee has the overall responsibility for policy planning and strategic direction. The strategic policy committee provides policy advice to the minister and government with respect to MTC's overall mandate, makes corporate decisions, and carries out strategic planning to achieve ministry objectives. Membership includes the deputy minister and nine senior executives.

The five program committees, a resources management committee (RMC), an operations committee and an audit committee, are sub-committees of SPC (see chart on next page). These committees are responsible to SPC for the effective management of ministry programs and the efficient and effective use of the resources available to the ministry.

Program Committees

The program committees provide a link between corporate strategies and operational plans. Each program committee is chaired by the program manager, who is a member of SPC. Membership includes executives in the program area and from other areas of the ministry to facilitate coordination and provide a broad corporate perspective.

Each program committee has received direction from SPC through the following mission statements:

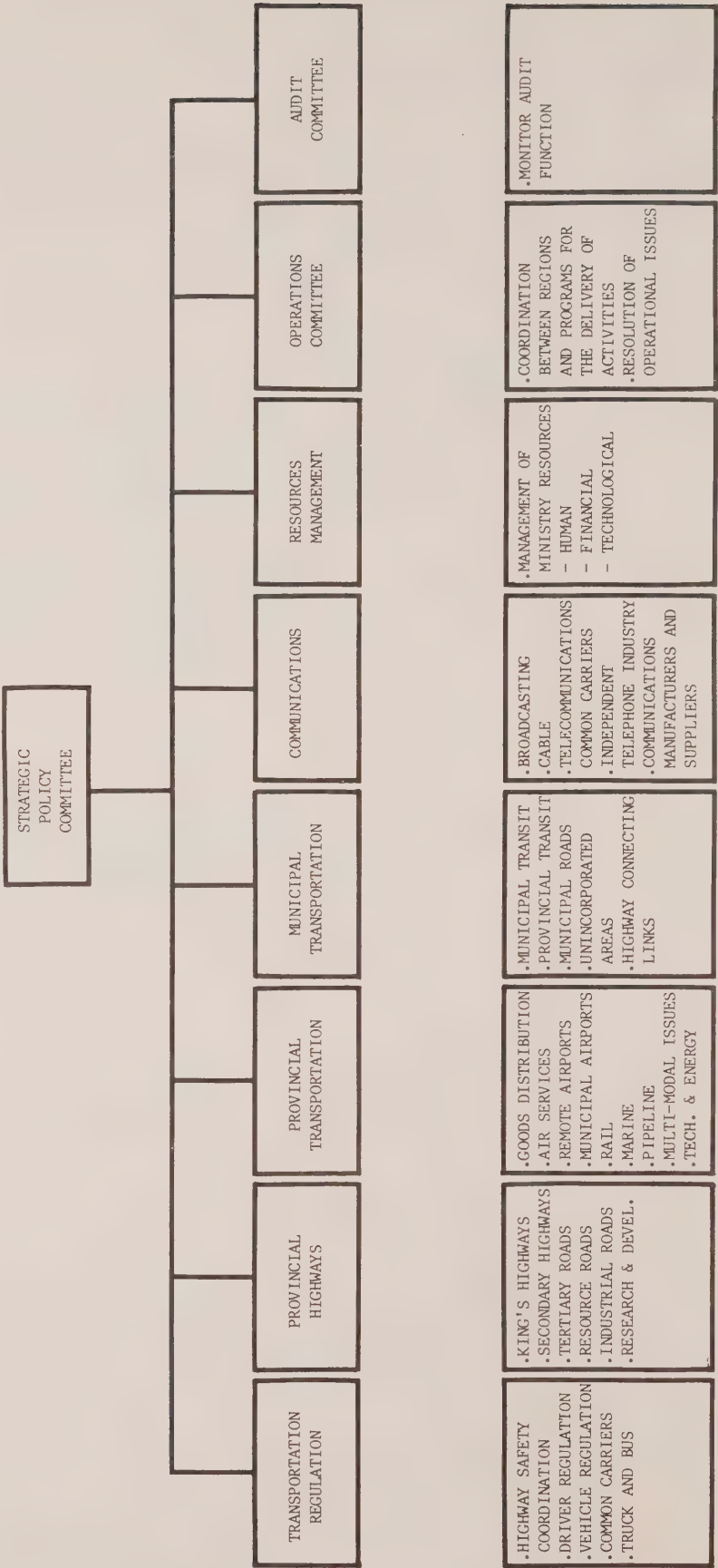
Provincial Highways Program

To provide and maintain a provincial highway system which will satisfy the mobility, economic, energy conservation, social and institutional needs of the people of Ontario and promote the objectives of government.

Transportation Regulation Program

To influence, through regulation and education, the qualifications and performance of the users of the highway transportation system and services in a manner which will enhance highway safety, the mobility of goods, the mobility of people, and support the prevailing objectives of the ministry and the Ontario government.

MTC CORPORATE COMMITTEE STRUCTURE



Communications Program

To promote the interests of Ontario users of communications systems and services, facilitate the mobility of information and contribute to the strength of the communications networks in Ontario in order to further the economic and social well-being of the people of Ontario.

Provincial Transportation Program

To promote and coordinate the inter-urban mobility of people and goods by the integrated use of all transportation modes operating and serving in Ontario and to points beyond the province.

Municipal Transportation Program

To provide for the mobility of people and goods at the local, regional and inter-regional levels through coordination and support of the transportation infrastructure and services supplied by local and provincial authorities.

Resources Management Committee (RMC)

This committee is chaired by the assistant deputy minister, finance and administration and includes all members of SPC except the deputy minister. It also includes MTC directors responsible for human resources, financial planning, and management improvement.

RMC has the basic responsibility to ensure the effective and efficient utilization of the human, financial and technological resources entrusted to the ministry in order to fulfill its mandate. RMC has human resources, technology advisory, and finance sub-committees.

Operations Committee

The operations committee is composed of the five regional directors, who have primary responsibility for program delivery. This committee meets on a regular basis to review and discuss matters related to program delivery. Direct linkages are maintained with SPC members to resolve the program delivery aspects of issues related to the various programs. It promotes a province-wide consistency in the delivery of ministry programs and ensures that issues identified at the "front line" are quickly brought to the attention of senior executives.

Audit Committee

The audit committee is chaired by the deputy minister and includes all members of SPC. This committee reviews the results and recommendations from internal ministry audit reports and responds to

comments from the provincial auditor on ministry operations and procedures. The director of the audit branch attends these meetings.

The Line Organization

A chart showing MTC's formal line organization is included in the back cover of this document. MTC's head office is responsible for policy and program development and control, while the responsibility for program delivery rests with five regional offices and their related districts. The regional directors also represent the ministry within their geographic areas.

A fundamental principle of ministry management is the decentralization of program delivery to the regions, with regional directors responsible to the appropriate head office program manager for the delivery of each program in their region. This continues to be the most feasible method for satisfying the transportation and communications requirements of Ontario residents.

Strategic Planning Process

Successful management of change requires MTC to anticipate important long-term issues, assess potential impacts, and develop appropriate strategies to respond. This is undertaken on an annual basis to ensure significant changes are detected early and that appropriate changes are incorporated into program planning.

The chart on the next page shows MTC's formal strategic planning process, which is coordinated by the ministry's strategic policy secretariat (SPS). This process provides for systematic annual reconsideration of MTC's environment, future direction and strategies.

Outlooks

The outlooks office monitors social, economic, political, and technological developments in the external environment to identify emerging issues and future directions in government, the private sector, and society in general. The outlooks office makes presentations and organizes meetings and conferences during the year to provide SPC with a broad range of external perspectives on key issues.

Program managers also conduct outlooks sessions for their areas of interest, with participation from client industries, other government agencies, academics, and representatives of the public.

Position and Prospects (P&P)

Each program committee and region prepares a P&P document to provide an assessment of activities, the identification of major issues and proposed alternative strategies. Decisions about some specific proposals are made by SPC at the presentation of the P&P document. Broader issues raised in the P&P papers are taken to the strategy planning conference for resolution.

Strategy Planning and Strategic Directions

Following the P&P presentations, SPC conducts a strategy planning conference to determine corporate issues and strategic directions. Input for the strategy planning conference is provided by an outlooks summary, the program P&Ps, and other external information summarized by SPS. Outputs from this session include a decisions package which provides immediate guidance to the program committees and the framework and content for developing the Strategic Directions document.

Senior Management Conferences

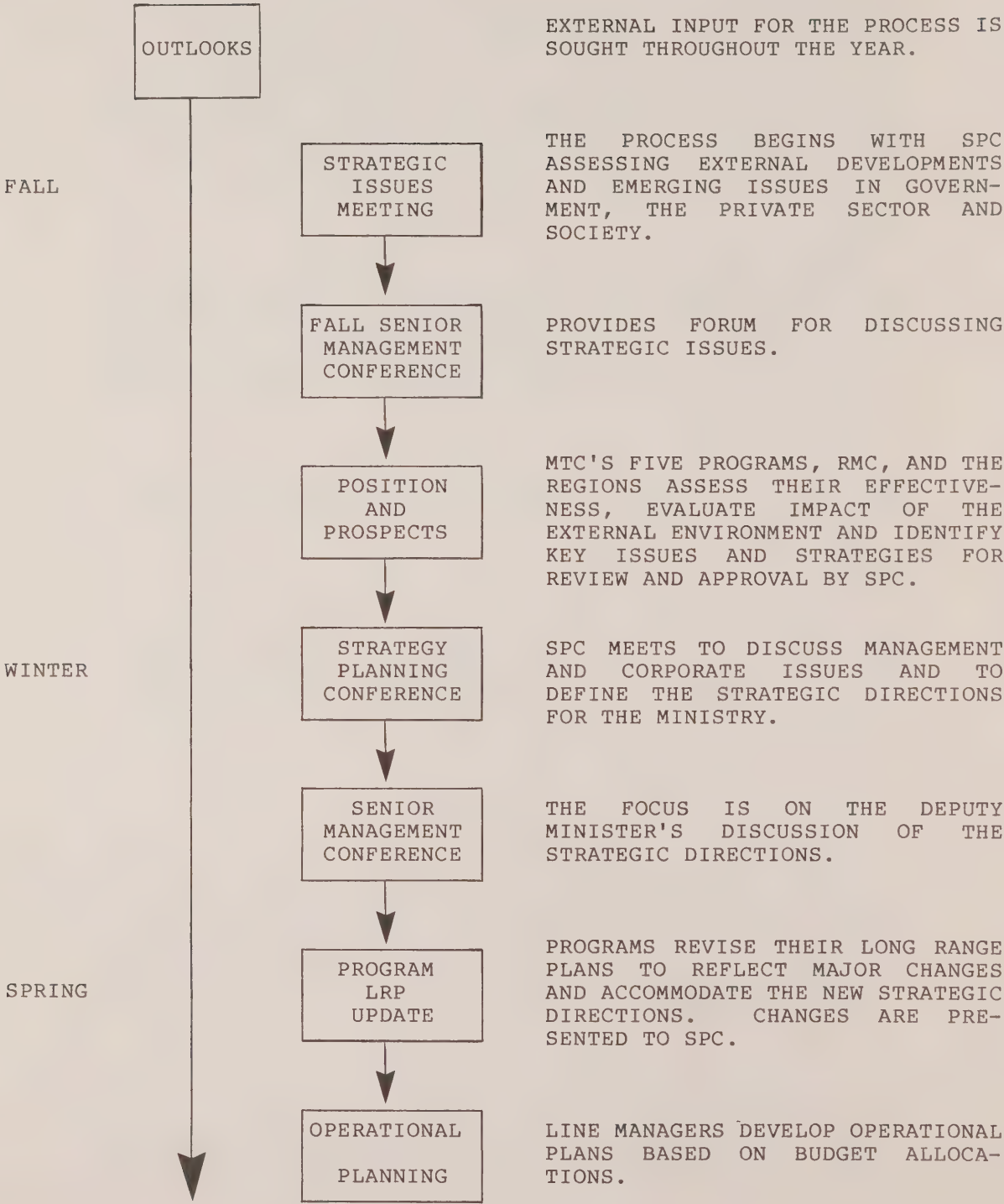
Each spring, upon completion of the Strategic Directions, all MTC's senior executives attend a senior management conference. The

MTC STRATEGIC PLANNING PROCESS

SEASON

STEP

PURPOSE



purpose of this conference is for the deputy minister to introduce the strategic directions to the ministry's senior managers. At the conference, senior executives have the opportunity to question the members of SPC on the deliberations of the committee and the reasons for the selection of particular issues and strategies.

A second senior management conference is held in the fall. At the fall conference, program chairmen report on the actions that have been achieved in moving toward the defined strategic objectives. This session also provides an opportunity for senior managers to discuss the emerging issues facing the ministry.

Program Long Range Plan Update

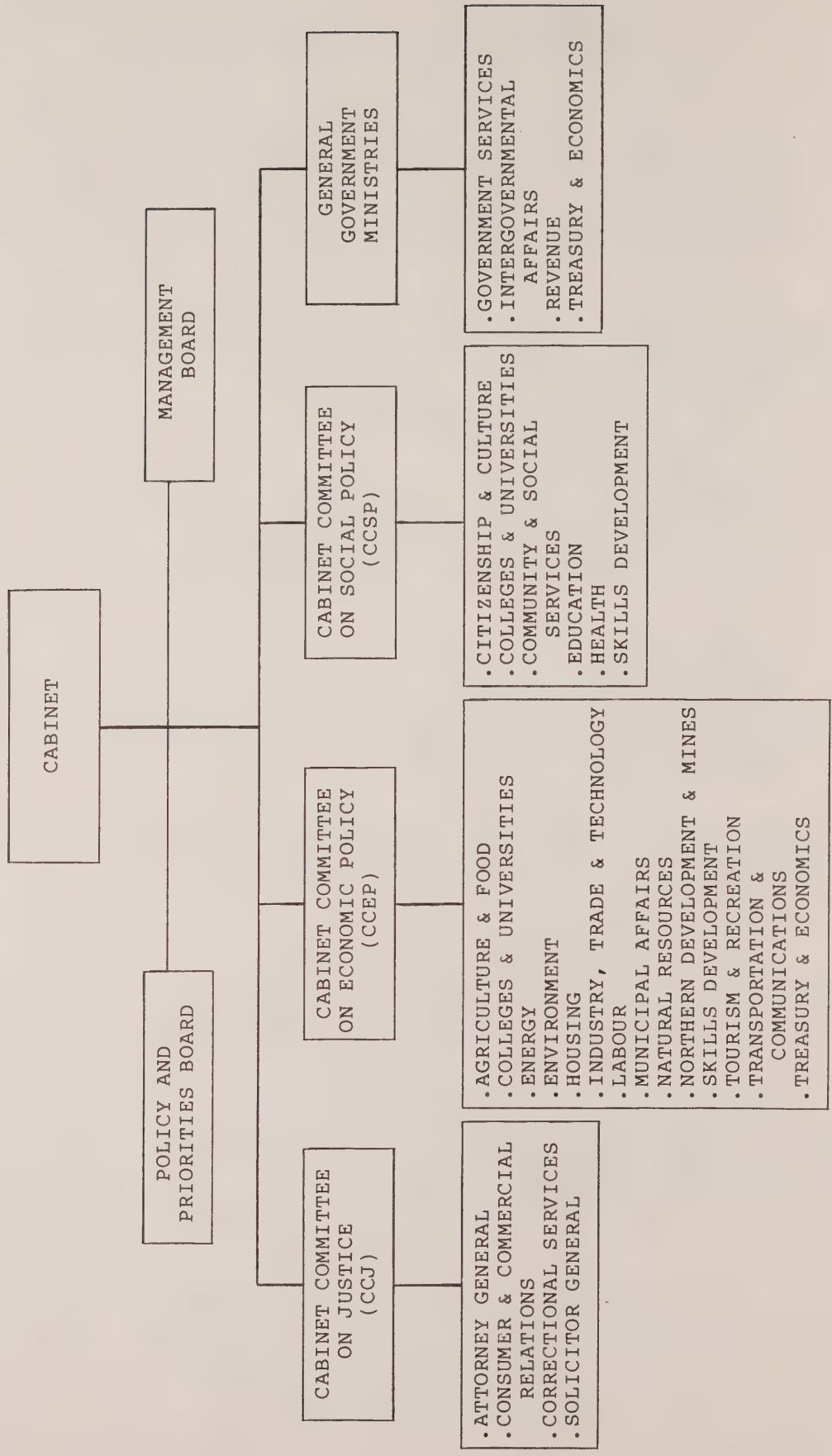
Each program chairman presents proposed revisions to their program's long range plan to respond to the corporate directions. The broad resource implications of new initiatives are included to indicate the adjustment to ongoing activities that would be required to accommodate new initiatives in the absence of additional funding.

Operational Plans

Line managers are responsible for developing operational plans for delivery activities. These plans document operational objectives, activities, resources, priorities, results, indicators, and monitoring, all within a defined timeframe.

Guidance for the preparation of operational plans is provided through the program long range plans and the available financial resources.

GOVERNMENT OF ONTARIO



Government Policy Development

As indicated earlier, SPC is MTC's senior corporate committee with overall responsibility for policy planning. Once a policy submission has been approved by SPC, it is often also necessary to obtain cabinet approval. Cabinet approval is required for new services, extension or reduction of existing services, or for policy changes that would have government-wide implications.

Before a policy submission is presented to cabinet, it must first be reviewed by at least one of the cabinet policy committees. MTC submits policy proposals through the Cabinet Committee on Economic Policy (CCEP). In addition, if a policy proposal has wider implications, it will also be submitted to other cabinet committees. For example, proposals dealing with transportation for disabled persons would be submitted to the Cabinet Committee on Social Policy (CCSP). Similarly, the proposal to include photo on drivers' licences was submitted to the Cabinet Committee on Justice (CCJ) because of the law enforcement implications.

Management Board is the agent of cabinet responsible for ensuring that the government's programs are managed appropriately. A separate Management Board submission is often required to allow the board to comment on financial and administrative implications. In these cases, when the policy proposal is submitted for cabinet approval, it is accompanied by recommendations from both Management Board and the appropriate cabinet committee.

Policy and Priorities (P&P) Board, chaired by the premier, is responsible for coordination of the government's financial allocation process and for making preliminary and final recommendations on ministry allocations. Among its other responsibilities, P&P Board also deals with issues that cross cabinet committees, policy issues brought forward by general government ministries and issues referred to it by cabinet or another cabinet committee. For example, Management Board may request policy clarification in order to assist in the determination of appropriate funding.

The responsibilities of the Ministries of Treasury and Economics, Intergovernmental Affairs, Revenue, and Government Services impact upon all ministries. The ministers responsible for these ministries are members of either P&P Board or Management Board which affords an opportunity for their contribution to policy formulation.

The Ministry of Treasury and Economics occupies a special place in the government structure because of its particular responsibility for establishing the fiscal framework for government activities. It should be noted that, as part of its responsibilities, Treasury and Economics staff work closely with the Management Board Secretariat in the annual resource allocation process.

Finally, coordination of policy and program activities in specific areas is often the responsibility of cabinet coordinating committees, which involve ministers whose responsibilities touch upon a specific area or client group. Examples of such special cabinet coordinating committees are those addressing legislation, regulations, native affairs, emergency planning, and race relations.

PART II
OUTLOOKS

Transition to a Post-Industrial Society

The developed nations of the world are undergoing a significant transformation from an industrial to a post-industrial or information society. This transformation may have a much greater impact on society than either the agricultural or industrial revolutions. Change is occurring so rapidly that society and individuals may have little time to adjust.

Many of the trends pertaining to the transition are interdependent. For the purpose of presentation, however, the trends will be discussed under four general headings: social, institutional, technological and economic. The role of work in the post-industrial society will also be examined.

Social

The transition to the post-industrial society is causing changes to traditional social relationships. People are placing increased emphasis on personal needs and objectives, such as demanding greater involvement and participation in decision-making. The efficient use of time is becoming more valued than the acquisition of material goods. Greater leisure time is resulting from declining weekly working hours, increased part-time work and shortened work weeks. An increasing proportion of this free time is being devoted to activities related to self-improvement such as continuing education, physical fitness and participation in volunteer endeavours.

Traditional family life is becoming unstable and diversified. A major factor is that women are expanding their role outside of the home. Only four percent of American families, in 1980, could be described as traditional -- the father working outside of the home, the mother taking care of the house and two children. It is now more common to have families consisting of a single parent with one or more children, two-career childless couples and various other arrangements.

Accelerated technological advancement is posing new social problems. These include peoples' inability to adjust to rapid change, technologically-induced unemployment, invasion of personal privacy and the implications of a computer-oriented society. Society is attempting to cope with these problems. One form of response is the growth of citizen movements.

The maturing of the industrialized countries is also reflected in the aging of their populations. This is resulting in increased demands for more and better health and social welfare services for the elderly. The aged are developing into a significant political and economic force.

Institutional

Institutions such as government, business and labour are undergoing major changes in the transition to an information-based society.

In the past, governments worked as a parliamentary democracy whereby the public was only indirectly involved. People are now seeking greater involvement in the political system. A participatory democracy is developing, involving greater consultation, recognition of minority concerns as well as freedom of information. Until recently, governments quickly expanded in terms of size, infrastructure, and the types of services provided in order to sustain the rapid growth of an industrial society. The trend now is toward size stabilization as well as diversification of functions. There is also a shift to the provision of social services.

In the heyday of industrial society, businesses concentrated on expansion and centralization, with top-down decision-making. The focus now is on organizational downsizing, decentralization, and the development of horizontal decision-making structures. Large corporations and businesses, while remaining primary employers, are now providing limited opportunity for new employment. Instead, small entrepreneurial firms are becoming the major source for new jobs.

Unions, which experienced rapid growth for many years, are now expanding at a much slower rate. Overall union membership in the United States has, in fact, been declining for several years. Union growth is now shifting from the manufacturing and public sectors to the information and service sectors. The traditional union issues have been salaries and working conditions. Union members, however, are now more concerned with job security, safety and personal satisfaction.

Technological

The computer has become the driving force of technological advancement. It replaces and amplifies mental labour much as the steam/combustion engine replaced physical labour. Computer applications are resulting in improvements to the products and processes of traditional manufacturing industries as well as the creation of new communications and information industries.

Previously, technology was used in factories for the mass production of goods. The computer now provides for the mass production and communication of information and knowledge. Data banks and networks are becoming the production and distribution centres for information.

Because of its emphasis on mass production, industrial technology fosters uniformity and standardization. Computer technology, on the other hand, provides the user with the opportunity for greater individuality and creativity.

Computer technology is expanding. Originally, computers were exclusively used for scientific purposes. Governments, businesses and industry adopted the computer for efficient management and process control.

Widespread use is now occurring as the computer moves into the school, office and home. This has necessitated the development of user-friendly high-touch equipment and software.

Economic

The world economy has been experiencing major changes since the 1970's. The transition of many of the industrialized countries to an information-based economy has resulted in slower economic growth accompanied by high levels of unemployment and underemployment. Increased competition from the developing countries in the manufacturing and resources sectors has been a major factor, as these countries can offer products at much lower prices. Sharp increases of oil prices in 1973 and 1979 have also had significant effects on the world economy.

In an industrial society, there are clearly defined primary, secondary and tertiary industries operating in a commodity economy. A matrix industrial structure is now developing, with information-related industries forming a quaternary sector. The strategic resource is shifting from capital to information, thereby facilitating access to the economic system. Information is being produced, stored and shared by a large number of users, resulting in a more synergetic economy.

Although the information and service sectors are expected to be the catalyst of economic growth, manufacturing and resources sectors will remain important. Information and process control technology will not eliminate industrial production, but will enhance the products and processes.

Technological innovations are expected to result in an accelerated increase in productivity. This will be hard to measure, however, as information will be a major product. Traditional input/output measures such as Gross National Product will be inappropriate as they focus on the manufacture of goods.

Developing countries are emerging as competitors in traditional manufacturing industries as well as new technological products. In order to be competitive, products made in the advanced nations need to derive more of their value from the quality of thought and innovation and less from the capital and labour that go into them.

At the same time, countries are becoming increasingly interdependent, providing the potential for greater world trade. Competition from the developing countries, however, is forcing many industrialized nations to adopt protectionist trading policies. Consequently, world trade is being increasingly dominated by managed trade. Major trading nations and blocs are negotiating informal agreements to restrict and confine trade flows in place of open, competitive trading arrangements.

Role of Work

The major trends associated with the transition to the post-industrial society are having significant impacts on work and the workplace. These trends include a greater emphasis on personal needs and objectives, the shift to an information-based economy, and widespread application of computer technology.

Jobs are being displaced and altered at an accelerating rate. The skills required are also undergoing change. Work is increasingly emphasizing the collection, analysis and dissemination of information. In parallel, jobs requiring interpersonal and human relations skills are becoming more important to provide the essential human element. New and continually changing jobs are resulting in multi-job careers becoming the norm. Career/life planning will be essential.

The labour force of the developed countries is expected to shrink due to population aging and a declining birth rate. The potential labour shortage, in conjunction with changing work ethics, will necessitate employers to more effectively use and better develop their human resources. One approach is to encourage entrepreneurial spirit and innovation within organizations.

New challenges are being placed on education, whereby educators and employers must anticipate and respond to the job and work force requirements of the post-industrial era. The traditional collective education system is evolving toward a more individual approach. Self-learning, with the use of computers, will be an essential component. Education is becoming a lifetime endeavour, teaching people how to learn, think and be creative in the transition to the information society.

References

1. Cohen, D. and Shannon, K., The Next Canadian Economy, Eden Press, Montreal, 1984.
2. Hawken, P., The Next Economy, Holt, Rinehart and Winston, N.Y., 1983.
3. Masuda, Y., The Information Society, World Future Society, Maryland, 1981.
4. Naisbitt, J., Megatrends, Warner Books Inc., N.Y., 1982.
5. Naisbitt, J., & Aburdene, P., Reinventing the Corporation, Warner Books Inc., N.Y., 1985.
6. Pinchot III., G., Intrapreneuring, Harper & Row, N.Y., 1983.

PART III

THE DIRECTIONS
1986

Meeting Ontario's Social and Economic Needs

In A Post-Industrial Society

The government has indicated a desire to establish key strategic directions that will shape the formulation and implementation of government policies and programs. To drive the development of these directions, the government has enunciated three specific strategic areas that need to be addressed: excellence in education; adapting to the post-industrial society; and future demographic impacts on health and institutional care.

These issues all speak to a concern for the long term social and economic well-being of Ontario. Canada, and most of the world, has come through a decade characterized by unpredicted major changes that have torn at the economic fabric and produced fundamental structural changes in many sectors of the economy. In the past ten years, Ontario has witnessed high energy pricing; twenty percent interest rates; double digit inflation; prolonged recession; double digit unemployment with youth being hardest hit; and abnormally high government deficits.

While we are now enjoying a period of relative stability and economic growth, there is a general recognition that the events of the last ten years have been a reflection of the turbulent nature of the world's economy and the transition to a post-industrial society. There is no longer a feeling of certainty or permanence. Many of the jobs of today will not be the jobs of tomorrow. The economic structure and competitiveness of industries and entire countries is being changed by trends toward: global manufacturing and service industries; dominance of newly industrializing countries (NICs) in assembly line and smokestack industries; and, more rapid technological change, highlighted by convergence of information technologies. The rules of the game in world trade are also unstable. This could be particularly unpalatable for Canada, which on a per capita basis has three times the international trade volume of Japan. As the General Agreement on Tariffs and Trade (GATT) stumbles toward the removal of most tariff barriers, there is a growing use of non-tariff barriers. In the United States, an annual trade deficit of over \$120 billion is creating a strong impetus for protectionist measures.

The developed nations of the world are now moving into the post-industrial or the information based age. Overall, Ontario has the potential to be in a strong position to meet the challenges ahead due to expertise in certain technology niches, the high penetration of informatics in the economy, the number of successful manufacturing industries and the generally high level of education in the work force. For Ontario to take full advantage of opportunities, a well conceived set of strategic directions is required to enhance industry competitiveness, encourage investment and exploit new technologies.

The Contribution of Transportation and Communications

The transportation and communications systems are the lifeblood of Ontario society. They underpin and provide pervasive support to almost all of our social and economic activity. A major contribution to our high standard of living in Ontario is our well developed and high quality transportation and communications systems which allow for the efficient movement of people, goods, and information.

Moving into the post-industrial society, a significant measure of the future growth of Ontario's economy, particularly in the area of job creation, will be in the information and services sector. The focus of activity will shift from the production of material goods to the creation and usage of information and knowledge. Related technologies are expected to make an important contribution to improvements in productivity in all economic sectors. Therefore, the extensive growth and development of communications industries and services will be critical to Ontario being able to continue to make a successful transition to this new era.

However, economic activity and personal mobility will always rely heavily on the adequacy of the transportation system. A high priority must continue to be placed on preserving and enhancing transportation systems. As an example, the trend toward 'just-in-time' delivery of inventory in the manufacturing sector depends on the availability of efficient and reliable transportation systems.

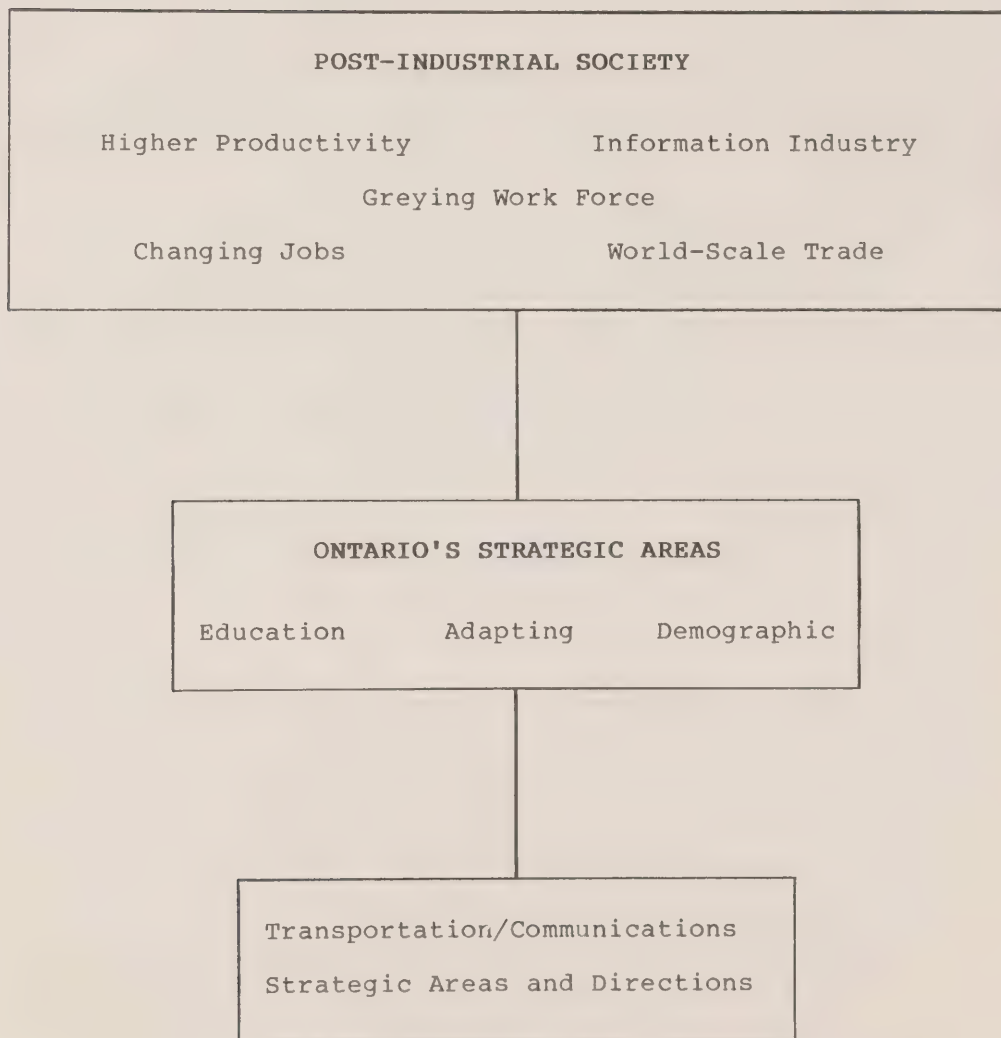
Government has a major social and economic role to play as a facilitator and innovator; ensuring responsiveness to industry and consumer needs and pursuing programs that are in the best interests of the people of Ontario. The chart on the next page illustrates some of the characteristics of the post-industrial society and some of the strategic areas that have to be addressed by government. Transportation and communications will have an essential role to play in Ontario's future.

The strategic directions that follow relate to the important role of transportation and communications in Ontario as the transition to the post-industrial society occurs. Ten strategic areas are presented with direction statements and related strategies. These were identified at the December strategy planning conference in response to the premier's request for identification of government strategic issues and for inclusion in this document.

MEETING ONTARIO'S SOCIAL AND ECONOMIC NEEDS

IN A

POST-INDUSTRIAL SOCIETY



Transportation and Communications

Strategic Areas and Directions

Industry Competitiveness

- . To support the competitiveness of Ontario's economy.

Communications Industries

- . To contribute to the growth and development of Ontario's communications industries.

Research and Development

- . To ensure Ontario's transition to the post-industrial society is supported by appropriate research and development initiatives.

Federal/Provincial Relations

- . To ensure federal policies and initiatives in transportation and communications are consistent with Ontario's interests.

Infrastructure Preservation

- . To maintain the essential contribution of the transportation infrastructure to the Ontario economy.

Greater Toronto Area

- . To ensure the provision of an adequate transportation infrastructure and system to support the economic development of the Greater Toronto Area.

Safety

- . To reduce the societal and long-term health care costs of road accidents.

Tourism

- . To contribute to the growth and development of Ontario's tourism industry.

Transportation/Communications Disadvantaged

- . To respond appropriately to the needs of the transportation/communications disadvantaged.

The Human Resource

- . To encourage a highly educated, productive and adaptive work force in a climate of increasing change.

Industry Competitiveness

TO SUPPORT THE COMPETITIVENESS OF ONTARIO'S ECONOMY

Transportation and communications facilities and services have and will continue to have major roles to play in supporting the competitiveness of Ontario's economy. The ability to place competitively priced goods on the domestic and international markets depends in large part on the quality and cost of transportation and communications services. Currently, physical distribution costs can constitute up to 20 percent of the selling price for manufactured goods and up to 50 percent of the selling price for bulk commodities.

It is also essential to directly and indirectly support the transportation industries. Development and marketing of their products are required in order to capture a fair share of the growing worldwide trade in manufactured transportation systems and equipment.

As Ontario enters the post-industrial age, sometimes referred to as the age of information, the province's traditional view of itself as the manufacturing and industrial heartland of the country is having to adjust to a new reality. The shift is evident from the fact that the information-intensive service industries' GPP share has grown from 35 percent in 1971 to 43 percent in 1984. Also, companies in Ontario currently spend an average of 11 to 17 percent of their budgets on telecommunications and advertising, creating annual revenues of over \$5 billion for communications industries in the province. It is apparent that the competitiveness of Ontario's industries is becoming more dependent on the competitiveness of the communications industry sector.

To highlight the growing importance of communications industries, they are covered separately in the next strategic area.

Strategies:

- Facilitate the efficient movement of people, goods and services by ensuring that transportation regulations, systems management and infrastructure enhance the cost effectiveness of transportation services through such initiatives as:
 - . regulatory reform of the trucking industry which will include reduction of the barriers to entry
 - . implementation of traffic management systems to improve traffic flows and reduce congestion in urban centres
 - . provision of information services to improve cost-effectiveness of physical distribution systems
 - . increased information exchanges with other Ontario government ministries, agencies and private industry to ensure mutual cooperation and involvement in the development of policies and programs promoting industry competitiveness

assistance to Ontario's transportation industries by encouraging the removal of economic and regulatory impediments and by assistance with market development and research

Communications Industries

TO CONTRIBUTE TO THE GROWTH AND DEVELOPMENT OF ONTARIO'S COMMUNICATIONS INDUSTRIES

About 100,000 people in the province are employed by communications industries in manufacturing, telecommunications, broadcasting, cable distribution, research and development and consulting. While Ontario has supported growth of these industries, future development requires the province to vigorously pursue opportunities to assist communications equipment manufacturing and service industries. As part of this, it is important to preserve and develop associated cultural industries that service national and international markets.

Ontario has many strengths for meeting the challenge of this new information age. These include our strong reputations in certain "technology niches" such as telephone equipment, digital switching, microwave and satellite transmissions and cable television systems. Ontario is also noted for good broadcasting and film production crews, co-production potential and a favourable dollar exchange rate.

There are many challenges to be met. Other provinces are aggressively working to fund and attract communications industries recognizing the economic leverage and future that they offer, often with the assistance of federal regional development programs. Also, the partnership role of government and industry in marketing both industries and consulting services, such as that utilized by European countries and Japan, requires encouragement.

Strategies:

- Foster and support growth of Ontario's communications and cultural industries through initiatives such as:
 - stronger advocacy for federal policies to enhance industry competitiveness, encourage investment, and exploit new technologies
 - encouraging the location and growth of communications industries in Ontario through targeted communications development assistance
 - ensuring all ministries involved in economic and industry development work closely to maximize efforts (e.g. joint referral program)
 - encouraging partnership of industry-government-academia
 - providing assistance to communications industries in the world-wide marketing of their products and services

Research and Development

TO ENSURE ONTARIO'S TRANSITION TO THE POST-INDUSTRIAL SOCIETY IS SUPPORTED BY APPROPRIATE RESEARCH AND DEVELOPMENT INITIATIVES

Research and development is an area that must receive increased attention if Ontario is to make a rapid and successful transition to the post-industrial society. The emerging trend towards global manufacturing and service industries means strong foreign competition and a renewed emphasis on technology and new product innovation. The convergence of communications, computer and automation technologies present an unparalleled array of opportunities from component manufacturing through to enhanced services. The rapid population growth in cities around the world places an emphasis on the development of urban transportation systems.

Research and development can provide the key to being able to take advantage of opportunities and preserve market share in existing markets. Ontario business has shown a recognition of the essential contribution that can be made by sharply increasing real spending on research and development over the past five years. Canada devoted 1.3 percent of its GNP in 1984 to research and development, compared to an average of 2.5 percent for other industrialized nations.

Strategies:

- Encourage product innovation and Ontario industry competitiveness by focussing attention on their research and development requirements and opportunities. This can be accomplished by:
 - strategic policy committee discussion regarding the role and needs of research and development activities in the ministry
 - development of a better understanding and coordination of current endeavours and opportunities
 - encouragement of a climate conducive to research and development activity, including greater collaboration between government, industry, university and R&D institutions
 - participation in the development of a national science and technology strategic plan
 - encouragement of the investment of research and development resources into specific technologies considered to have the potential for the greatest return

Federal/Provincial Relations

TO ENSURE FEDERAL POLICIES AND INITIATIVES IN TRANSPORTATION AND COMMUNICATIONS ARE CONSISTENT WITH ONTARIO'S INTERESTS

The impacts on Ontario of shifts in federal policy, legislation, or regulation are large and will continue to be so for the foreseeable future. This is particularly so in transportation and communications, where the federal government has jurisdiction in major areas including air, rail, marine and communications. To date, Ontario has been effective in influencing the federal government through well researched reports and submissions that have represented Ontario's positions. However, new directions and changes at the federal level need to be continually monitored and evaluated to ensure that Ontario's interests are understood as early as possible in the federal decision-making process.

Strategies:

- Effectively represent Ontario's interests and influence federal government policy. At this time, important federal activities relevant to the province include:
 - . free trade discussions with the United States which could have strong impacts on Ontario, e.g. possible loss of Bill C-58 which provides Canadian border broadcasters some protection from U.S. broadcasters
 - . ongoing regulatory decisions in communications, e.g. Ontario has argued for reduced regulation to stimulate competition and growth
 - . potential federal legislative changes that could indirectly transfer some historical responsibilities for funding and program delivery to the provinces, for example:
 - the proposed revisions to the National Transportation Act
 - the federal airport management review
 - National Passenger Rail legislation
 - . trucking regulatory reform
- Actively pursue Ontario's policy goals in air, rail and marine to ensure a climate conducive to the development of associated Ontario technology and industries.

Infrastructure Preservation

TO MAINTAIN THE ESSENTIAL CONTRIBUTION OF THE TRANSPORTATION INFRA- STRUCTURE TO THE ONTARIO ECONOMY

Ontario's high quality and highly developed transportation infrastructure will continue to be important to the movement of people, goods and the provision of services in the post-industrial society. Currently, 55% of the value of all exports cleared in Ontario is moved by road transportation. In Toronto alone, 432 million passenger rides are provided by transit. The supporting infrastructure, which represents a capital investment of some \$20 billion for provincial highways alone, also includes municipal roads, transit vehicles and stations, ferry boats and docks, municipal and remote airports, and rail lines. A high level of repair and upkeep is essential. Significantly greater traffic congestion and repair costs in the future will result if this infrastructure is not adequately maintained.

Strategies:

- Effective use of allocated resources to maintain the transportation system, through initiatives such as:
 - research into and application of innovative and cost-effective methods to extend the life of existing infrastructure
 - implementation of pavement management methods and procedures
 - provision of a transit consulting service to municipalities
 - encouragement of the use of automated maintenance methods and procedures for transit equipment and plant to extend life and reduce costs
 - coordination of road repair with municipal repair of right-of-way services such as sewers, water systems
- Selective expansion to meet new capacity needs.
- Allocation of maintenance and rehabilitation dollars on a fixed bottom line base amount calculated by need.

Greater Toronto Area

TO ENSURE THE PROVISION OF AN ADEQUATE TRANSPORTATION INFRASTRUCTURE AND SYSTEM TO SUPPORT THE ECONOMIC DEVELOPMENT OF THE GREATER TORONTO AREA

Many of Ontario's urban centres are experiencing growing traffic congestion situations that must be addressed. While the needs of the greater Toronto area will be balanced with the needs and the requirements of other parts of the province, the complex interrelationships between jurisdictions in this locale presents a unique coordination challenge.

Population growth over the next 25 years is expected to add 1.5 million new residents to the greater Toronto area, primarily in the regions adjacent to Metro Toronto. There will also be a significant growth in employment opportunities throughout the area, with concentrations in established and developing subcentres. These demographic and employment trends indicate the greatest pressures for travel will be felt within the regions surrounding and across the boundaries into Metro Toronto. Also, the expected move by many industries to 'just-in-time' inventory deliveries will place increased pressure for highly efficient road networks. Currently there are many proposals being put forward and developed which involve large expenditures and will have significant implications for the involved jurisdictions.

Strategies:

- Encourage and coordinate the planning and implementation of an effective and balanced network of roads and transit to serve the greater Toronto area for the near and long term future through:
 - coordination between affected jurisdictions
 - identification and evaluation of major issues and needs
 - establishment of directions that:
 - support urban development and economic growth
 - maintain existing roads and transit systems
 - maximize operational efficiency of road and transit networks
 - provide for interregional transportation needs

Safety

TO REDUCE THE SOCIETAL AND LONG-TERM HEALTH COSTS OF ROAD ACCIDENTS

Road accidents in the province are near the top of the list of causes of death and disabling injuries, and the associated health care and insurance costs will continue to grow as the delivery of services and the settling of claims become more expensive. The social costs are wide-ranging and equally serious and disruptive. Currently, it is estimated the overall cost of these road accidents is approximately \$3 billion annually.

Over the last several years there has been no reduction in the number of accidents or the frequency of injuries although there has been a decline in the severity of injuries. The public is placing a high priority on the need to prevent road accidents and is supportive of the new tougher laws that have introduced stronger penalties to lessen the incidence of drinking and driving. Pressure will continue for government to attempt to reduce the number and seriousness of road accidents. However, road safety is a complex problem and coordination of the efforts of various stakeholders will be required to achieve substantial improvements.

Strategies:

- Greater coordination of efforts within and outside government to determine appropriate actions to further improve road safety. Potential initiatives include:
 - greater emphasis on municipal and rural accidents which are disproportionately high
 - greater emphasis on pedestrian, cyclist and motorcycle fatalities
 - investigation of the societal cost of road accidents
- Implement innovative policies designed to improve highway safety.

Tourism

TO CONTRIBUTE TO THE GROWTH AND DEVELOPMENT OF ONTARIO'S TOURISM INDUSTRY

Tourism is expected to grow to be one of Ontario's top three industries in the future. It currently contributes five percent of Ontario's GPP and directly accounts for five percent of total employment. It is a major industry in the southern portion of the Province and is becoming increasingly important to the economy of Northern Ontario. Transportation plays an integral part; 39 percent of tourism expenditures are on transportation, and 38 percent of expenditures on passenger transportation are for tourism. Therefore, the industry is heavily dependent on the effectiveness, efficiency and attractiveness of transportation systems to enable people to move into and around attraction areas since 'getting there can be half the fun'.

Strategies:

- Ensure that transportation systems support the development of Ontario's tourism industry through:
 - improved service centres, roadside picnic areas and highway and tourism signing
 - encouragement of transit initiatives which respond to tourist needs
- Stimulate U.S. and off-shore tourism through:
 - demonstrations of market potential for transportation packages
 - brokering world-wide integrated air, rail, bus and marine charter tours
 - direct promotion of Ontario's road, rail and marine tourist routes
- Develop an information/reservation system that integrates the various transportation alternatives, and includes the hospitality facilities in the Province.

The Transportation/Communications

Disadvantaged

TO RESPOND APPROPRIATELY TO THE NEEDS OF THE TRANSPORTATION/ COMMUNICATIONS DISADVANTAGED

The Ontario Government has attempted in the past to meet the needs of transportation/communications disadvantaged through various policy and subsidy programs for the physically disabled. However, provision of programs and services for a wider definition of the transportation/communications disadvantaged is gaining increased prominence as various groups are recognized, or prepare challenges under the Charter of Rights. It is now recognized that the existing narrow definitions of the transportation/communications disadvantaged may not suffice in the future. A reevaluation will have to be undertaken to determine whether a new interpretation will be required.

A broadening of this definition could have major economic resource requirements, especially in light of the increasing proportion of older people in our society over the next fifteen to twenty years. It will, therefore, be incumbent on government to develop innovative policies that meet emerging needs while reflecting the economic realities of good government.

Strategies:

- Identification of the transportation/communications disadvantaged which may include those affected as a result of financial, geographic or more widely defined physical reasons.
- Determination of feasible methods to address the needs of the disadvantaged within a prudent fiscal framework, e.g. initiatives that would help groups to assist themselves.
- Improved liaison between appropriate ministries/agencies to address the above.

The Human Resource

TO ENCOURAGE A HIGHLY EDUCATED, PRODUCTIVE AND ADAPTIVE WORK FORCE IN A CLIMATE OF INCREASING CHANGE

Flexibility and effectiveness of human resources and organizational structures and processes are essential components of a post-industrial society which emphasizes the development, processing and communication of information.

Over the next 10 to 15 years, there will be an increasing requirement for more flexible organizational structures that can respond to rapidly changing needs, and there will probably be an accompanying trend toward more horizontal organizations. New challenges will also be placed on education, whereby educators and employers must anticipate and respond to the job and work force requirements of the post-industrial era, including higher level knowledge and ability needs. Individuals must be equipped with portable and adaptable skills in a society where the multi-job career will become the norm.

With respect to government it can be expected that the movement away from direct delivery of services will continue in combination with the adoption of a stronger influence role. Senior level staff will be considered government corporate resources rather than ministry-specific resources. Middle management staff will have to possess more specialized knowledge skills to operate effectively in less supervised and more consultant-oriented positions. As opportunities to advance become limited due to a relatively static work force, government will have to be more innovative in approaches to maintain employee motivation, productivity, and job satisfaction through such initiatives as cooperative exchanges and educational programs between industry, government and educational institutions.

Strategies:

- Encourage and facilitate the development of organizational expertise and effectiveness, and organizational climates conducive to personal growth, development and job satisfaction by:
 - exploring and pursuing staff exchanges between government, industry and universities
 - regularizing linkages with educational institutions with respect to recruitment and training, setting of relevant study curricula and encouraging more university/industry/government co-op programs
 - providing input to the Civil Service Commission regarding the classification system, emphasizing the need for increased flexibility in allocating jobs to suitable categories and reasonable pay band levels

- . determining the skills mix and balance between generalist and specialist training and development that is appropriate for each respective program
- . determining the needs and level of training required at the corporate level and implementing appropriate programs
- . better defining what skills are expected of managers to provide objectives for training
- . enhancing senior management commitment to and accountability for provision of ongoing educational upgrading opportunities, e.g. information technology courses
- . continuing to emphasize affirmative action for women in the ministry's human resources planning, development and management processes
- . improving methods of staff exchange between regions, districts and head office
- . continually improving human resources management practices and processes

APPENDIX

Continuing Strategic Directions

This appendix includes continuing directions from 1985 that are not alluded to in part III. Their inclusion recognizes their ongoing strategic importance to the ministry.

Information Technology

- . support role
- . outline basic principles
- . establish extent and rate of implementation
- . examine organizational structure impacts
- . complete program positions on future needs

Municipal Transportation

- . share expertise and advice with municipalities

Productivity Improvement

- . commitment to internal efficiency

Regulatory Reform

- . monitor reforms in all modes in other jurisdictions to assess possible impacts of similar actions in Ontario

Service to the Public

- . promote good public service
- . minimize public inconvenience wherever possible



Ministry of
Transportation and
Communications

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